DECLARATION OF DR. BRUCE WHITELAW

I, Christopher Bruce Alexander Whitelaw, declare as follows:

1. I am an inventor of the invention claimed in US Patent Application No. 10/522,536, derived from International Patent Application No. PCT/GB2003/003192, filed on 25 July 2003.

2. I obtained an honours degree in Biology in 1982 from the University of Edinburgh, UK and a PhD on the analysis of the transcriptional control domains of the human c-*myc* proto-oncogene in 1986 from the University of Glasgow, UK. I have been the Head of the Division of Developmental Biology at the Roslin Institute, Edinburgh, UK since 2005. I am currently the Editor-in-Chief of the publication Transgenic Research and the co-director of the Scottish Network of Excellence for the Development of Novel Technologies to Fight Viral Disease in Farm Animals. I have authored or co-authored a large number of papers regarding cloning techniques and transgenic animals. My curriculum vitae including a list of these publications is enclosed herewith as Appendix A.

3. Currently, I am Head of the Division of Developmental Biology at the Roslin Institute, Edinburgh, UK.

4. I am familiar with the above-referenced patent application and the Office Action dated 14 December 2007. I understand that objections have been raised under 35 USC §112 and that the Examiner considers that the claims do not comply with the written description requirement or the enablement requirement. I understand that the claims that have been examined are directed to a method of detecting a gene activation event *in vivo* by assaying a transgenic non-human animal whose cells express a construct comprising a nucleic acid sequence encoding a beta-lactoglobulin (BLG) under the control of the Cyp1a1 promoter and a nucleic acid sequence encoding a peptide sequence having the sequence of SEQ ID NO. 1, wherein the animal is subjected to a gene activation event of toxicologically induced stress, and a method of screening for, or monitoring of toxicologically induced stress by using said transgenic non-human animal. I understand that the claims have now been limited to transgenic rodents.

5. The Examples of the present application provide sufficient information to a person of skill in the art to produce a transgenic rodent as now claimed for use in the present invention.

6. In particular, Example 11 gives guidance regarding the expression of epitope tagged lipocalin reporter proteins in transgenic animals. Example 11 teaches that transgenic animals can be generated using one of several standard methods in the art including pronuclear injection, blastocyst injection of transfected cells or using viral vectors. These methods were well known in the art at the priority date of the present invention and a skilled person would readily be able to carry out these methods using their knowledge and the teachings of the scientific papers referred to on page 48, lines 15 to 19 of the present application.

7. Example 11 also gives specific guidance as to how to product transgenes containing the Cyp1a1 promoter sequence driving expression of myc epitope tagged BLG reporter, as described on page 48, line 25 to page 49, line 7.

8. The present application also gives guidance as to how to identify positive transgenic animals by analysis of DNA. Page 49, lines 9 to 15 of the present application also demonstrates how to detect and screen for a gene activation event of toxicologically induced stress. In particular, page 49, lines 10 to 15 specify that transgenic animals are exposed to stress, for example by drug administration, and blood and urine samples are collected over time. Samples collected pre- and post-insult are analysed for the presence of the tagged lipocalin by methods including Western blot and ELISA. Depending on the specific insult or inducing agent an increase or decrease in reporter activity are detected.

9. The Cyp1a1 promoter is also well described and characterised in the art, for example in WO 97/23635.

10. It is thus my opinion that one skilled in this field would be able to put the invention into practice using the disclosure of the present application and would believe that the inventors had possession of the invention now claimed.

Date 8th May 2008

Christopher Bruce Alexander Whitelaw.

Appendix A

Curriculum Vitae

Bruce Whitelaw *1st March 2008*

I am Head of Division at: The Roslin Institute and Royal (Dick) School of Veterinary Studies
Division of Developmental Biology
University of Edinburgh
Roslin, Midlothian
EH25-9PS
Scotland, UK

Education

1982	BSc (2.1)	University of Edinburgh	Biology (Virology elective)
1987	PhD	University of Glasgow	(Beatson Institute)

Thesis "An analysis of the transcriptional control domains of the human c-*myc* proto-oncogene" supervised by Neil Wilkie.

Positions

2005 – present	Head of Division
2001 – present	Member of Roslin Animal Ethics Committee
2005 – present	Member of Institute Executive Committee
2006 – present	Member of Roslin Research Ethics Committee
2007 – present	Member of Institute Science Management Group
2007 – present	Member of Institute Finance and Business Committee
2007 – present	Chair of Institute Search Committee
2007 – present	Member of Roslin Institute Postgraduate Student Committee
2007 – present	Member of Easter Bush Research Consortium Executive Committee
2007 – present	Member EBRC Building Steering Group

External:

1999 – present	Editor *Transgenic Research*
2006 – present	Member OIE Ad hoc Group on Biotechnology
2007 – present	Co-director Scottish Network of Excellence for the Development of Novel Technologies to Fight Viral Disease in Farm Animals
2007 – present	Member of Scientific Council of ImmunoGenes Ltd (Budpaest)

Previous positions:

2004 – 2005	Genetic Modification Programme Coordinator at Roslin Institute
2000 – 2003	Head of Small Animal Unit (10 staff)
1994 – 2005	Principal Investigator at Roslin Institute
1994 – 2005	Member of Roslin Institute's Genetic Modification Safety Committee
1994 – 2000	Institute Biological Safety Officer
1994 – 2000	Member of Roslin Institute's Health and Safety Committee
1986 – 1994	Research Scientist at Roslin Institute (formerly IAPGR, formerly ABRO)

External:

2001 – 2006	Member EU COST B20 Action Management Committee
2000 – 2004	Invited lecturer for Genetics and Molecular Biology (Science Faculty) Honours students, University of Edinburgh
2000 – 2003	Honorary Research Fellow of Hannah Research Institute (Ayr, UK)
2000 – 2003	Member of HSE's Advisory Committee of Genetic Modification (ACGM)

Additional Details on Committees/Groups

- OIE Ad hoc Group on Biotechnology – an interdisciplinary international group developing guidelines for research on vaccines in animal health application of nanoscience/nanotechnology as it relates to animal health and animal health risks related to somatic cell nuclear transfer.
- Contributed to the build project for The Roslin Institute (temporarily called the EBRC) through membership of Building Steering Group and Architect Users Group.

Previous:

- COST B20 Action Management Committee – UK representative on European funded Cooperation in the field of Science and Technical Research action "Mammary gland development, function and cancer".
- Advisory Committee of Genetic Modification (ACGM) – BBSRC proposed member on Health & Safety Executive's advisory committee providing technical and scientific advice to the UK Competent Authorities on all aspects of the human and environmental risks of the contained use of genetically modified organisms (GMOs).

Visiting Groups

- Review of University of Veterinary Studies (VUW), Vienna (Vienna, 2008).
- Review of Europaische Akademie study "Pharming: Genetically modified plants and animals as future production site of pharmaceuticals" (Berlin, 2007).
- Review of Xenotransplantation Research Unit led by Prof Bruno Reichart on behalf of the Deutsche Forschungsgemeinschaft (Munich, 2007).
- Review of pre-proposals for Graduate Schools and Centres of Excellence in Biomedical Sciences on behalf of the Deutsche Forschungsgemeinschaft (DFG), the main funding agency for basic research in Germany (Frankfurt, 2006).
- Review of research infrastructure on behalf of the Higher Education Authority (HEA) of Ireland to forge a top level Roadmap for Investment in Research Infrastructure in Ireland (Trinity College Dublin/University College Dublin/NUI Galway, 2006).

Additional Information

- BBSRC Institute Career Path Fellowship interview panel (2008)
- Invited participant in Technology Strategy Board BioScience Roadmap Workshop (2008)
- Reviewer for Science Foundation Ireland Equipment Call (October 2007)
- Invited participate at Genesis Faraday Workshop on genetics of livestock emissions (Edinburgh, 2007).
- European Science Foundation peer reviewer (2007-2008).
- Reviewed selection of topics for future priority setting of life sciences in Austria for Austrian Council for Research and Technology Development (2006).
- Reviewed Transitional Funding with regard to Hannah Research Institute staff for SEERAD (2006).
- Invited participant at EC RETHINK project (2006-2007).
- Presented at British Council Café Scientifique, Paris, (2006).
- Invited expert at EC Cloning in Public Project (2005, 2006).
- Scientific Expert for the EC COST Mammary Gland Biology Network on trips to Italy, France and Hungary (1997-2002).
- Invited participant at ICSU workshop on Risk/Benefit Assessment of GM Foods (Paris, 2001).
- Invited participant at EC Task Group Workshop on Public Perception of Transgenic Animals (Helsinki, 2000).
- Member of International Society of Transgenic Technologies (ISTT).
- Regularly review grants for BBSRC, MRC, EC and Wellcome Trust.
- Nominated to Cartagena Protocol on Biosafety roster of experts.
- PhD thesis External Examiner for Universities of Edinburgh (UK), Imperial College London (UK), Paris and Limoges (France), Barcelona (Spain) and Waikato (New Zealand).
- Received financial support from BBSRC, SHEFC, IACR, BCC, Breakthrough Trust, EC FWIV/FWV/FWVI, ESTO, Genesis Faraday, Rainbow Fund and British Council; plus commercially funded projects with Sygen International and CXR Biosciences.

Students Supervised

PhD thesis:

1999 Simon A. Boa "Nucleosome organisation over the ovine β-lactoblobulin gene".
2002 Margaret L. Opsahl "Variegated transgene expression in mice".
2004 Gillian H. Little "Stat5 binding to chromatin".
2004 Chris Palgrave "African Swine Fever Virus pathogenesis: comparative analysis of immunoregulatory genes in domestic and wild pigs".
2006 Douglas B. Vasey "p21 expression in the mouse".
2006 Ravikumar Manikam "Myostatin expression in the mouse mammary gland".
2007 Rachel Young "Oxidative stress reporter genes".

MSc thesis:

2004 Pali Verma "Modulation of immune system by down regulation of TNF receptors I, II and p65 gene expression by RNA interference".

Meetings/Seminars

Organised:

- COST 825 Working Group on Mammary Bioreactors (Roslin, 2000)
- ESF Workshop "Genetic Models of Disease Resistance on Transgenic Livestock" (Edinburgh, 2007)

Co-organised:

- Royal Society of Edinburgh workshop on Mammary Gland Biology (Edinburgh, 1992)
- First International Workshop on Mammary Gland Biotechnology (Budapest, 1997)
- Second International Workshop on Mammary Gland Biotechnology (Budapest, 2001)

Session chair:

- COST 825 Mammary Gland Biology Symposium (Tours, 1999)
- Second International Workshop on Mammary Gland Biotechnology (Budapest, 2001)
- Transgenic Animal Research Conference VI (Lake Tahoe, 2007)
- *International Conference on Biotechnology (2008)*

I have given 42 seminars within Europe, Japan and USA, and 26 seminars within the UK; most recently

- "Making transgenic animals with lentiviral vectors", Institute of Comparative Medicine, University of Glasgow, 7th February 2007
- "The many ways to make transgenic animals", RIVAGE EU Marie-Curie EU project, INRA, Jouy-en-Josas, 7th June 2007
- "Cloning and Genetics – what Roslin Institute does best", Ribblesdale Farmers Club, 12th December 2007

Invited seminars:

- "Production of transgenic farm animals by viral vector mediated gene transfer", International Congress on Animal Reproduction, Budapest, 13th-17th July 2008.
- International Conference on Biotechnology, Dalian China, 12th-17th October 2008.
- Congress Biotechnology, Havana Cuba, 30th November - December 2008.

PUBLICATIONS

1. Lang JC, Whitelaw B, Talbot S and Wilkie NM (1988) Transcriptional regulation of human c-myc gene. Br J Cancer, 58, 62-66.
2. Clark AJ, Bessos H, Bishop JO, Brown P, Harris S, Lathe R, McClenaghan M, Prowse C, Simons JP, Whitelaw CBA and Wilmut I (1989) Expression of human anti-hemophilic factor IX in the milk transgenic sheep. Bio/Tech 7, 487-492.
3. Clark AJ, Ali S, Archibald AL, Bessos H, Brown P, Harris S, McClenaghan M, Prowse C, Simons JP, Whitelaw CBA and Wilmut, I (1989) The molecular manipulation of milk composition. Genome 31, 950-955.
4. Whitelaw CBA and Clark AJ (1989) Animal bioreactors. AgBiotech News and Information 1, 701-705.
5. Wilmut I, Archibald AL, Harris S, McClenaghan M, Simons JP, Whitelaw CBA and Clark AJ (1990) Methods of gene transfer and their potential use to modify milk composition. Theriogenol 33, 113-123.
6. Whitelaw CBA, Archibald AL, McClenaghan M, Harris S, Simons JP Watson CJ, Wilmut I and Clark AJ (1990) Expression of ß-lactoglobulin and hybrid transgenes in the mammary gland. Proc Biotech USA, pp. 130-136.
7. Clark AJ, Archibald AL, McClenaghan M, Simons JP, Whitelaw CBA and Wilmut I (1990) The germline manipulation of livestock: progress during the past five years. Proc NZ Soc Animal Prod 50, 167-179.
8. Lang JC, Wilkie NM, Clark AM, Chudleigh A, Talbot S, Whitelaw B and Frame MC (1991) Regulatory domains within the P0 promoter of human c-myc. Oncogene 6, 2067-2075.
9. Whitelaw CBA, Archibald AL, Harris S, McClenaghan M, Simons JP, Springbett A, Wallace R and Clark AJ (1990) Frequency of germline mosaicism in G0 transgenic mice. Mouse Genome 88, 114.
10. Whitelaw CBA, Archibald AL, Harris S, McClenaghan Simons JP and Clark AJ (1991) Targeting expression to the mammary gland: intronic sequencs can enhance the efficiency of gene expression in transgenic mice. Transgenic Res 1, 3-13.
11. McClenaghan M, Archibald AL, Harris S, Simons JP, Whitelaw CBA, Wilmut I and Clark, AJ (1991) Production of human α1-antitrypsin in the milk of transgenic sheep and mice: targeting expression of cDNA sequences to the mammary gland. Anim Biotech 2, 161-176.
12. Wilmut I, Archibald AL, McClenaghan M, Simons JP, Whitelaw CBA and Clark AJ (1991) Production of pharmaceutical proteins in milk. Experimentia 47, 905-912.
13. Whitelaw CBA, Harris S, McClenaghan M, Simons JP and Clark AJ (1992) Position-independent expression of the ovine ß-lactoglobulin gene in transgenic mice. Biochem J 286, 31-39.
14. Whitelaw CBA (1992) Transgenic animals as bioreactors. AgBiotech News and Information 4, 371N-372N.
15. Whitelaw CBA, Springbett A, Webster J and Clark AJ (1993) The majority of G0 transgenic mice are derived from mosaic embryos. Transgenic Res 2, 29-32.
16. Springbett AJ, Burdon T, Yull FE and Whitelaw CBA (1993) Comment on mosaic nature of G0 transgenic mice. Mouse Genome 91, 113.
17. Clark AJ, Archibald AL, McClenaghan M, Simons JP, Wallace R and Whitelaw CBA (1993) Enhancing the efficiency of transgene expression. Phil Trans R Soc Lond B 339, 225-232.
18. Clark AJ, Bissinger P, Bullock D, Damak S, Wallace R, Whitelaw CBA and Yull FE (1994) Chromosomal position effects and modulation of transgene expression. Reprod Fert Dev 6, 589-598.
19. Wilmut I and Whitelaw CBA (1994) Strategies for production of pharmaceutical proteins in milk. Reprod Fert Dev 6, 625-630.
20. Farini E and Whitelaw CBA (1995) Ectopic expression of ß-lactoglobulin transgenes. Mol Gen Genet 246, 834-837.
21. Whitelaw CBA (1995) Regulation of ovine ß-lactoglobulin gene expression during the first stage of lactogenesis. Biochem Biophys Res Comm 209, 1089-1093.
22. Webster J, Wallace R, Clark AJ and Whitelaw CBA (1995) Tissue-specific,temporally-regulated expression mediated by the proximal promoter of the ovine ß-lactoglobulin promoter in transgenic mice. Cel. Mol Biol Res 41, 11-15.
23. Streuli CH, Edwards GE, Delcommenne M, Whitelaw CBA, Burdon TG and Watson CJ (1995) Stat5 as a target for regulation by the extracellular matrix. J Biol Chem 270, 21639-21644.
24. Whitelaw CBA (1995) Pharmaceuticals from transgenic sheep. Biol Sci Rev 7, 25-27.
25. Donofrio G, Bignetti E, Clark AJ and Whitelaw CBA (1996) Comparable processing of ß-lactoglobulin pre-mRNA in cell culture and transgenic mouse models. Mol Gen Genet 252-465-469.

26. Whitelaw CBA (1996) Hormonal influences on ß-lactoglobulin transgene expression inferred from chromatin structure. Biochem Biophys Res Comm 224, 121-125.
27. Whitelaw CBA (1996) Truncated β-lactoglobulin transgenes are expressed in the kidney. Gene 178, 157-159.
28. Webster J, Donofrio G, Wallace R, Clark AJ and Whitelaw CBA (1997) Intronic sequences modulate the sensitivity of ß-lactoglobulin transgenes to position-effects. Gene 193, 239-243.
29. Grolli S, Accornero P, Ramoni R, Donofrio G and Whitelaw CBA (1997) Expression of c-myc is down-regulated as mouse mammary epithelial cells become confluent. Biochem Biophys Res Comm 239, 566-569.
30. Sola I, Castilla J, Pintado B, Sanchez-Morgado JM, Whitelaw CBA, Clark AJ and Enjuanes L (1998) Transgenic mice secreting coronavirus neutalising antibodies into the milk. J Virol 72, 3762-3772.
31. Langley B, Vilotte JL, Stinnakre MG, Whitelaw CBA and L'Huillier P (1998) Rescue of MMTV transgene by co-intergration reveals locus control properties of the ovine β-lactoglobulin gene. Transgenic Res 7, 205-211.
32. Whitelaw CBA and Webster J (1998) Temporal profile of DNaseI hypersensitive sites associated with the ß-lactoglobulin gene and transgenes. Mol Gen Genet 257, 649-654.
33. Pena RN, Folch, JM, Sanchez A and Whitelaw CBA (1998) Chromatin of goat and sheep ß-lactogloulin gene differ. Biochem Biophys Res Comm 252, 649-653.
34. Whitelaw CBA (1998) Chromatin structure of ß-lactoglobulin transgenes. Proc 1st Int. Workshop on Mammary Gland Biotechnology, pp. 31-34.
35. Whitelaw CBA and Webster J (1998) Chromatin heterogeneity within multicopy transgene arrays. Transgenic Res 7, 401-402.
36. Whitelaw CBA (1999) Toward designer milk. Nat Biotech 17, 135-136.
37. Whitelaw CBA Farini E and Webster J (1999) The changing role of cell culture in the generation of transgenic livestock. Cytotech 31, 3-8.
38. Whitelaw CBA and Clark AJ (1999) Optimisation of transgene expresssion in the mammary gland. in Animal and Cell Technology: Basic and Applied Aspects, Ed. Y Kitagawa, T Matsuda and S Iijima. Kluwer Academic Publishers, Dordrecht, The Netherlands.
39. Whitelaw CBA, Grolli S, Accornero P, Donofrio G and Webster J (2000) Matrix attachment region regulates basal β-lactoglobulin transgene expression. Gene 244, 73-80.
40. Donofrio G, Cavirani S, Whitelaw CBA, Flammini CS and Scatozza F (2000) Transfection of bovine cell culture with Bovine herpesvirus 4 DNA obtained by cell nuclear extraction. Microbiol 23, 129-135.
41. James RM, Neil C, Clark AJ, Webster J, Roos S and Whitelaw CBA (2000) Multiple copies of beta-lactoglobulin promoter do not function as LCR. Biochem Biophys Res Comm 272, 284-289.
42. Tonner E, Allan G, Shkreta L, Webster J, Whitelaw B and Flint D (2000) Insulin-like growth factor binding protein-5 (IGFBP-5) potentially regulates programmed cell death and plasminogen activation in the mammary gland. Adv Exp Med Biol 480, 45-53
43. Whitelaw CBA (2000) Nucleosome organisation of the β-lactoglobulin gene: transcription complex formation. Adv Exp Med Biol 480, 147-153.
44. Tywman RM and Whitelaw, CBA (2000) Genetic engineering: Animal cell technology. Encyclopedia of Cell Technology, pub. Wiley, pp. 737-819.
45. Christou P and Whitelaw CBA (2000) Frontiers in Transgenic Research. Transgenic Res 9, 241-242.
46. Kolb AF, Pewe L, Webster J, Perlman S, Whitelaw CBA and Siddell S (2001) A virus neutralising antibody expressed in milk of transgenic mice provides full protection against virus-induced encephalitis. J Virol 75, 2803-2809.
47. Flint DJ, Tonner E, Knight CH, Whitelaw CBA, Webster J, Barber M and Allan G (2001) Control of mammary involution by insulin-like growth factor binding proteins: role of prolactin. Livestock Prod Sci 70, 115-120.
48. Whitelaw CBA, Webster J, Kastanis P, Farini E, Osman F, Kaempfer R, Hiripi L and Bosze S (2001) Potential to exploit RNA processing elements in transgenic mice. Cloning Stem Cells 3, 170.
49. Kolb AF, Webster J, Whitelaw CBA and Siddell SG (2001) A virus-neutralising monoclonal antibody expressed in the milk of transgenic mice. Adv Exp Med Biol 494, 411-414.
50. Whitelaw CBA (2001) Pharmaceutical proteins in milk from transgenic animals. Encyclopedia of Genetics, pub. Fitzroy Dearbarn, pp. 370-373.
51. Whitelaw B (2001) Transgenic Animal Welfare. Transgenic Res 10, 375.
52. Gerencser A, Barta E, Boa S, Kastanis P, Bosze Z and Whitelaw CBA (2002) Comparative analysis of the structural features of the 5'-flanking region of the mouse and rabbit κ-casein genes. Genet Select Evol 34, 1-12.

53. Opsahl ML, McClenaghan M, Springbett A, Reid S, Lathe R, Colman A and Whitelaw CBA (2002) Multiple effects of genetic background on variegated transgene expression in mice. Genetics 160, 1107-112.
54. Tonner E, Barber M, Allan GJ, Webster J, Whitelaw CBA and Flint DJ (2002) Insulin-like growth factor binding protein-5 (IGFBP-5) induces premature cell death in the mammary gland of transgenic mice. Development 129, 4547-4557.
55. Whitelaw CBA and Bruce DM (2002) Does genetic modification violate intrinsic value? Trends Biotech 20, 488-489.
56. Pena R and Whitelaw B (2002) Recombinant protein production in milk. Bio Sci Rev 15, 39-41.
57. Opsahl ML, Springbett A, McClenaghan M, Lathe R, Colman A and Whitelaw CBA (2003) Trans-silencing by a variegated transgene in mice. Transgenic Res12, 661-699.
58. Clark AJ and Whitelaw CBA (2003) A future for transgenic livestock. Nat Rev Genet 4, 825-833.
59. Vilotte JL, Whitelaw CBA, Ollivier-Bousquet M and Shennan D (2003) Advanced Dairy Chemistry 3rd Edition, ed. P. Fox and P. McSweeney, Kluwer Academic, pp. 699-738.
60. Whitelaw CBA, Hiripi L, Farini E, Opsahl, ML and Bosze Z (2004) On the use of post-transcriptional processing elements in transgenes. Transgenic Res13, 75-79.
61. Pena RM, Webster J, Kwan S, Korbel J and Whitelaw CBA (2004) Transgene methylation in mice reflects copy-number but not expression level. Mol Biotechnol 26, 215-220.
62. Whitelaw CBA, Radcliffe PA, Ritchie WA, Carlisle A, Ellard F, Pena R, Rowe J, Clark AJ, King TJ and Mitrophanous KA (2004) Efficient generation of transgenic pigs using equine infectious anaemia virus (EIAV) derived vector. FEBS Lett 571, 233-236.
63. Whitelaw CBA (2004) Transgenic livestock made easy. Trends Biotech 22, 157-159.
64. Pena RN and Whitelaw CBA (2005) Duplication of Stat5-binding sites within the β-lactoglobulin promoter compromises transcription in vitro. Biochimmie 87, 523-528.
65. Ritchie WA, Taylor JE, Gardner JO, Wilmut I, Carlisle A, Neil C, King T and Whitelaw CBA (2005) Live lambs born from zona-pellucida denuded embryos. Cloning Stem Cells 7, 178-182.
66. Flint DJ, Boutinaud M, Tonner E, Wilde C, Hurley W, Accorsi PA, Kolb A, Whitelaw CBA, Beattie J and Allan GJ (2005) Insulin-like growth factor binding proteins initiate cell death and extracellular matrix remodelling in the mammary gland. Dom Anim Endocrinol 29, 274-282.
67. Whitelaw CBA and Sang HM (2005) Disease Resistant Genetic Modified Animals. Rev Sci Tech 24, 275-283.
68. Whitelaw CBA (2005) Development of germline manipulation technologies in livestock. Applications of gene-based technologies for improving animal production and health in developing countries, ed. HPS Makkar and GJ Viljoen, Springer, pp. 99-109.
69. Kolb AF and Whitelaw CBA (2006) Heavy chain toxicity in embryonic stem cells. Mol Immunol 43, 677-89.
70. Flint DJ, Boutinard M, Whitelaw CBA, Allan GJ and Kolb AF (2006) Prolactin inhibits cell death and expression of matrix metallo-proteinases in the involuting mouse mammary gland but fails to prevent cell loss in the mammary glands of mice expressing Insulin-like Growth Factor Binding Protein (IGFBP)-5 as a mammary transgene. J Mol Endocrinol 36, 435-448.
71. Gencheva M, Boa S, Fraser R, Simmen MW, Whitelaw CBA and Allan J (2006) In vitro and in vivo nucleosome positioning on the ovine beta-lactoglobulin gene are related. J Mol Biol 361, 216-230.
72. Ritchie WA, Neil C, King T and Whitelaw CBA (2007) Transgenic mice produced from low titre lentiviral vectors. Transgenic Res 16, 661-664.
73. Suk J, Bruce A, Gertz R, Warkup C, Whitelaw CBA, Braun A, Oram C and Papatryfon I (2007) Dolly for Dinner? Assessing commercial and regulatory trends in livestock & fish biotechnology. Nat Biotech 25, 47-53.
74. Murray JD, Whitelaw B and Montoliu L (2007) Meeting Report: UC Davis Transgenic Animal Research Conference VI. Transgenic Res 16, 835-837.
75. Bősze Z, Baranyi M and Whitelaw CBA (2008) Producing recombinant human proteins in the milk of livestock species. Adv Exp Med Biol. 606, 357-393.
76. Vasey DB, Wolf RC, MacArtney T, Brown K and Whitelaw CBA (2008) p21-LacZ reporter mice reflect p53-dependent toxic insult. Toxicol Appl Pharmacol 227, 440-450.
77. Strathdee D, Whitelaw CBA and Clark AJ (2008) Early embryonic ß-actin expression is not sufficient for CpG-island maintenance. J Biol Chem 283, 11509-11515.
78. Rowe J, Welsh C, Pena RN, Wolf CR, Brown K and Whitelaw CBA (in press) Illuminating the role of CYP1A1 in skin. J Invest Dermat
79. Manickam R, Pena RN and Whitelaw CBA (in press) Mammary gland differentiation inversely correlates with GDF-8 expression. Mol Reprod Dev.

80. Ritchie WA, King T, Neil C, Carlisle A, Lillico S, McLachalan G and Whitelaw CBA (in press) Transgenic sheep designed for transplantation studies. Mol Reprod Dev
81. Nelson L, Anderson S, Archibald AL, Rhind S, Condie A, Lu Z, McIntyre N, Thompson J, Nenutil R , Vojtesek B, Whitelaw CBA, Little T and Hupp T (in press) an animal model to evaluate the function and regulation of actively evolving stress protein SEP53 in oesophageal bile damage response. Cell Stress Chaperon

Patents

1. Archibald AL, Clark AJ, Harris S, McClenaghan M, Simons JP and Whitelaw CBA (1989) A genetic construct of which protein-coding DNA comprises introns and is designed for protein production in transgenic animals. PCT/GB89/01343.
2. Whitelaw CBA, Clark AJ and Wolf CR (2003) Multi-reporter gene model for toxicological screening. PCT/GB2003/003192.
3. Clark AJ and Whitelaw CBA (2004) Disease resistant transgenic non-human animals. PCT/GB2004/002793.
4. Wolf CR, Whitelaw CBA, Clark AJ, Brown K and Temperley SM (2004) Excretable reporters. PCT/GB2004/004054.
5. Wolf CR, Whitelaw CBA, Clark AJ, Brown K. Detection of cellular stress.